

Family EMBALLONURIDÆ.

EMBALLONURA NIGRESCENS.

Mosia nigrescens, Gray, Voyage of the 'Sulphur,' Mammals, p. 23 (1844).

A single specimen of this, the smallest species of the genus, which is at once distinguished from *E. monticola* from the adjoining parts of the Oriental region by the very differently shaped muzzle, by the widely separated nostrils, and by its conspicuously smaller size.

E. nigrescens has hitherto been recorded from Amboina and Ternate only.

Besides the discovery of the new species described above, the following generalizations are afforded by an examination of the species represented in this collection:—

I. That New Britain and New Ireland agree very closely in their Chiropterous fauna with that of other lands within the Australian region (Austro-Malayan subregion), three species only out of twelve (*Macroglossus minimus*, *Phyllorhina galerita*, and *Kerivoula hardwickii*) extending also into the Oriental region.

II. That, to judge from the large proportion of frugivorous Bats in the collection (nearly two thirds of the whole), New Britain and New Ireland agree with the Oceanic Islands in this respect, rather than with the continental lands within the Australian region.

3. On the Rodents and Marsupials collected by the Rev. G. Brown in Duke-of-York Island, New Britain, and New Ireland. By EDWARD R. ALSTON, F.L.S., F.Z.S., &c.

[Received February 14, 1877.]

(Plates XVIII. & XIX.)

Mr. Selater has kindly intrusted me with the determination of the Rodents and Marsupials contained in Mr. Brown's interesting collection.

They are few in number, consisting of but six species. Three of these appear to be identical with animals known to inhabit New Guinea, while the remainder belong to hitherto undescribed species. The latter, however, find their nearest allies either in New Guinea or in Northern Australia, thus fully confirming the strictly Papuan character of the fauna of this group. The large proportion of new species in this small collection shows, nevertheless, that a perceptible amount of change has taken place, and leads us to hope that many novelties will yet reward the researches of Mr. Brown, after whom I propose to name the first of the new species:—

1. *MUS BROWNI*, sp. n.

Fur both above and below stiff and harsh, most of the hairs being developed into fine flattened and channelled spines; on the back a

few much longer cylindrical bristly hairs. Ears moderate, rounded, almost naked. Tail nearly naked, covered with about 150 rings of large scales mixed with very short stiff hairs. Hind feet large and broad, thumb of fore feet well developed, with a flat nail.

Upper parts grey mixed with reddish, each bristle being light grey at the base and either black or light rufous towards the tip, the longer hairs black throughout. Chin, throat, breast, belly, and inside of limbs dull white; feet white, each with a dark stripe on the upper surface; on the fore feet this mark is near the middle of the foot, on the hind feet nearer the outer edge. Ears and tail dusky.

Measurements of two specimens (in spirits):—

	♂ in.	♀ in.
Length of head and body	5.60	5.15
„ head	1.55	1.45
„ ear55	.55
„ tail	4.90	4.50
„ hind foot.	1.00	.95

Skull and teeth typically murine. Female with two pair of pectoral and two of abdominal teats; male with testes very largely developed.

This spiny Rat is nearly allied to the North Australian species described by the late Dr. Gray under the name of *Acanthomys leucopus*¹; but it is a very much smaller species, and differs both in colour and proportions. The collection contains a female in skin and both male and female in spirits.

Along with these are four young Mice too immature to be safely determined. If, as I believe, they belong to the present species, the hair is softer and the colour of the upper parts more rufous in youth.

2. UROMYS RUFESCENS, sp. n. (Plate XVIII.)

Fur close and woolly, the longer hairs little developed. Ears short, rounded, naked. Tail shorter than the head and body, naked, tessellated with very small convex subcircular scales.

Upper parts bright chestnut, the hairs being lead-coloured at the base and broadly tipped with bright rufous, the longer hairs black, the top of the head more greyish. Lower parts white, the two colours being sharply defined; feet pale brownish. Ears and tail dusky.

Measurements of a female (in spirits):—

	in.
Length of head and body	5.00
„ head	1.45
„ ear50
„ tail	4.30
„ hind foot.	1.05

¹ P. Z. S. 1867, p. 598. This, like the present species, clearly belongs to true *Mus* and not to *Acanthomys*, Lesson (= *Acomys*, Geoffr.). It will therefore require to be renamed, Gray's specific title being preoccupied by the common North-American Mouse, *Mus leucopus*, Rafinesque (*Hesperomys leucopus* anctt.).

This handsome Rat is most nearly allied to the species from Salawatti, recently described by Dr. Peters and the Marquis G. Doria as *U. bruijni*¹; but it is about a third smaller, is more uniformly rufous in colour, and has the tail markedly *shorter* (instead of longer) than the head and body. All the other described species have long particoloured tails².

Dr. Peters, in his original characters of this genus³, says that the dentition is quite similar to that of *Mus*; but one of the present specimens, having the teeth less worn than in his example of *U. macropus*, shows that the ridges of the molars are not definitely divided into tubercles. The viscera are almost exactly like those of the common Rat, except that the cæcum is slightly more elongated.

3. PERAMELES DOREYANUS.

Perameles doreyanus, Quoy et Gaim. Voy. de l'Astrolabe, i. p. 100, Atlas, pl. xvi.

The collection contains one skin of this well-known Papuan species. First discovered (but not systematically named) by Lesson and Garnot on the island of Waigiou⁴, it was afterwards found by Quoy and Gaimard at Dorey Harbour, New Guinea. According to Dr. Gray, specimens were sent by Mr. Wallace from the Aru Islands⁵; but the *Perameles* of that group has since been separated by Dr. Peters and the Marquis G. Doria as *P. aruensis*⁶; and the same authors have described two other allied species—*P. rufescens* from the Ké Islands⁷, and *P. longicaudata* from New Guinea⁸.

4. BELIDEUS ARIEL.

Belideus ariel, Gould, P. Z. S. 1842, p. 11.

This pretty little Flying Phalanger is represented by an adult male and female in skin, and an immature male in spirit. In the female the extreme tip of the tail is white, doubtless an individual variety. As in other Papuan examples, there is a much broader dark mark round the eye than in the North-Australian specimens described by Mr. Gould⁹; but I do not think they can be specifically separated; and when a sufficient series from different parts of the continent of Australia are compared I suspect that this species will have to be united with the southern *B. breviceps*.

The known range of this Phalanger is extensive. First described from North Australia, it has been found in New Guinea by S. Müller, in Batchian and the Aru Islands by Wallace and Von Rosenberg, and in Halmahera by Bernstein.

¹ Ann. Mus. Civ. Genova, viii. p. 336 (1876).

² Dr. A. B. Meyer lately indicated a new species from New Guinea under the name of *U. papuanus* (Ann. and Mag. Nat. Hist. 1876, xvii. p. 146), without giving any description. As he states, however, that it is nearly allied to *U. aruensis*, Gray, it can hardly be the present animal.

³ Monatsb. Ak. Berlin, 1867, p. 343.

⁴ Voy. de la Coquille, i. pt. 1, p. 123.

⁵ P. Z. S. 1858, p. 113.

⁶ Ann. Mus. Civ. Genova, vii. p. 542.

⁷ Op. cit. p. 541.

⁸ Op. cit. viii. p. 335.

⁹ In the figure in the 'Mammals of Australia' (i. pl. xxvii.) no black mark whatever is shown; but a narrow black line is mentioned in the description.

5. CUSCUS ORIENTALIS.

Didelphys orientalis, Pallas, Misc. Zool. p. 59.

An adult female *Cuscus* in skin and a half-grown female in spirits are strikingly different in appearance; but I cannot at present separate them from this very variable species. The former is of a dark sooty grey above, with an obscure dorsal streak; the fur is very close and woolly; and the tips of the hairs have a bright silvery lustre. The latter (which measures, head and body, 8·80 inches, tail 7·80 inches) is bright shining rufous above, slightly washed with black, but with no definite dorsal streak; lower parts and spot below ear light yellow.

Both differ from the characters usual given of *C. orientalis* in having only *two* small incisors behind the large central lower pair, and in wanting the small extra premolar in the upper jaw. But, as Mr. Waterhouse has observed¹, these small teeth are not to be trusted in this group. I find that a skull of *C. ursinus* in the British Museum has two small incisors on one side and three on the other; and of two skulls of *C. celebensis*, Gray, a male has one only in each ramus, while a female has one on the right and three on the left. In all other essential characters Mr. Brown's specimens agree with *C. orientalis*; and it must be left to future observation to show whether the peculiarity of their dentition is or is not constant.

According to Lesson and Garnot this animal is termed *Kapoune* by the natives of New Ireland, with whom it is a favourite article of food².

6. MACROPUS LUGENS, sp. n. (Plate XIX.)

Muffle entirely naked, the bare space extending in a band over each nostril. Ears moderate, sparsely haired except near the base. Tail clad for the first three inches with short woolly hair, thence to the end scaly, nearly naked at the sides, more thickly clad above and below with short stiffish hairs. Fur moderately soft, not close-set, with no under-fur; hair of occiput radiating from a point a little behind the ears, that of the nape directed *backwards*, that of the vertex *forwards*, forming a transverse crest where it meets the fur of the forehead and temples. Hair of breast radiating from each axilla, that of the throat and chin directed *forwards*.

Upper parts almost uniform umber-brown, darkest on the back, the hairs unicolorous to the base, flanks and thighs lighter, feet darker brown. From the upper lip a broad but ill-defined brownish-white stripe passes to below the eye. Chin brownish black; throat, breast, and belly pale isabelline.

Approximate measurements (in skin) of an immature male:—

	in.
Length of head and body.....	22·00
„ head.....	3·50
„ ear	1·75
„ tail	14·00
„ hind foot (without claw).....	4·50

¹ Nat. Hist. Mamm. i. p. 265.

² Voy. de la Coquille, Zool. i. p. 158.

